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**Proposed UIs,
Weight & Power Calculator
Oct 12, 2004**

Route View

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- Route View - WPC Road Map when linked to a JMPS route**

Right click to select Point Designation in the Form

| TP | Fix/Point | Description | WPC Form Design. | Mode |
|----|-----------|---------------|------------------|--------|
| 1 | KNPA/A | PENSACOLA NAS | Depart, Cruise | Hover |
| 2 | .hover1 | Delay#1 | | Cruise |
| | .hover2 | Delay#2 | | Hover |
| 3 | | | | Cruise |
| | .hover1 | Delay#1 | | Hover |
| 4 | | | Arrival | Hover |

✓ Departure
✓ Cruise
Arrival

✓ Hover Calculator
Cruise Calculator

1. Select icon in Mode column to open Generic Point View at each point
2. User changes input parameters in Generic Point View for What-if conditions

Right click to select mode for each point for What-if calculation

Point View - WPC

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- Generic Point View- Point Designation & Mode Selection

1. Spinner to select Route Point

2. Grey-out when not linked to a route (user manually inputs)

Drop-down menu to select modes available

All FPM inputs are listed for user's modification

Inputs: Default: ☒ Manual: ☒ JMPS: ☒ Output: ☒ Warning: ☒

Point#: 1 Mode: Cruise Hover

CRUISE CALCULATOR

| | | | | | |
|--|-------|-------------|-------|---------------|-------|
| PA | 0 | FAT | 15 | GWT | 16000 |
| VIAS | 54 | VTAS | 60 | | |
| | | Dual Engine | | Single Engine | |
| | | | #1 | #2 | |
| Anti-Ice | | | | | |
| Operating Limit | | | | | |
| Rate-of-Climb | | | | | |
| Download Change | | | | | |
| Transmission Limit | | | | | |
| Temperature Lapse Rate | | | | | |
| ATF/ETF | 1.00 | | 1 | 1 | |
| Torque Required | 44 | | 87 | 87 | |
| Fuel Flow | 809 | | 624 | 624 | |
| Best Endurance Airspeed (KTAS) | 71 | | 71 | 71 | |
| Best Range Airspeed (KTAS) | 112 | | 101 | 101 | |
| 99% Best Range Airspeed (KTAS) | 121 | | 108 | 108 | |
| Never Exceed Airspeed (KTAS) | 190 | | 190 | 190 | |
| Mach Limit Airspeed (KTAS) | 213 | | 213 | 213 | |
| Torque Available | 100 | | 122 | 122 | |
| Max Flight Weight | 23000 | | 20553 | 20553 | |
| Min Airspeed (KTAS) | 0 | | 29 | 29 | |
| Max Airspeed (KTAS) | 144 | | 114 | 114 | |
| Max Rate of Climb Airspeed (Vy) (KTAS) | 71 | | 71 | 71 | |
| Max Rate of Climb at Vy (ft/min) | 2605 | | 836 | 836 | |
| Max Rate of Climb at Vinput (ft/min) | 2558 | | 789 | 789 | |
| Absolute Ceiling (ft) | 16000 | | 9504 | 9504 | |
| Absolute Ceiling FAT (degC) | -17 | | -4 | -4 | |
| Service Ceiling (ft) | 16000 | | 8714 | 8714 | |
| Service Ceiling FAT (degC) | -17 | | -2 | -2 | |

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- | UH-60/AH-64 PERFORMANCE PLANNING CARD | | | | | | | | | | | | | |
|--|------|-----|----------|-------------|-------|------------|-------|------|-----|------|-----|-----|-----|
| For use of this form, see T.O.s 1-212 and 1-214; the proponent agency is TRADOC. | | | | | | | | | | | | | |
| DEPARTURE | | | | | | | | | | | | | |
| PA | OR | FAT | IS | TAKEOFF GWT | | | 14517 | | | | | | |
| LO/M | N | | DUPL ENG | | | SINGLE ENG | | | | | | | |
| FUEL | 2517 | | N | | | #1 | | #2 | | | | | |
| MAX TORQUE AVAILABLE MAX ALLOWABLE GWT (GENCE) GO/NO-GO TORQUE (GENCE) PREDICTED HOVER TORQUE (GENCE) | | | A/F | | 1.00 | E/F | | 1.00 | E/F | 1.00 | | | |
| | | | TR | | 1.00 | TR | | 1.00 | TR | 1.00 | | | |
| | | | 100 | | 113 | | 122 | | 132 | | | | |
| | | | 18954 | | 22043 | | | | | | | | |
| | | | 81 | | 100 | | | | | | | | |
| | | | 70 | | 57 | | | | | | | | |
| REMARKS: | | | | | | | | | | | | | |
| Note: All Airspeeds are TAS. | | | | | | | | | | | | | |
| CRUISE DATA | | | | | | | | | | | | | |
| PA | OR | FAT | IS | MTC | | | MTC | | | | | | |
| MAX TORQUE AVAILABLE CRUISE SPEED CRUISE TORQUE CRUISE FUEL FLOW CONT TORQUE AVAILABLE MAX RVC OR ENDURANCE IAS MAX RANGE IAS SINGLE-ENG CAPABILITY VS (MIN/MAX) MAX ALLOWABLE GWT - SINGLE-ENG SINGLE-ENG MAX RVC VS (MAX GWT) | | | DUPL ENG | | | SINGLE ENG | | | | | | | |
| | | | TR | | | N/C | | | TR | | N/C | TR | N/C |
| | | | N/C | | | N/C | | | N/C | | N/C | N/C | |
| | | | IAS | | TAS | | 145 | | IAS | | TAS | | |
| | | | N/C | | | | | | | | | | |
| N/C | | | | | | | | | | | | | |
| N/C | | | | | | | | | | | | | |
| N/C | | | | | | | | | | | | | |
| N/C | | | | | | | | | | | | | |
| N/C | | | | | | N/C | | N/C | | | | | |
| N/C | | | | | | N/C | | | | | | | |
| N/C | | | | | | | | | | | | | |

| FUEL MANAGEMENT | | | | | | |
|--|---------------------------|---------------------------|---------------------------|-------------------|-----|------|
| FUEL/TIME | | BURNOUT | | | | |
| START | / | RESERVE | | | | |
| STOP | / | CONSUMPTION RATE | | LB PER H | | |
| ARRIVAL | | | | | | |
| PA | 100 | FAT | 95 | LANDING GWT 12445 | | |
| MAX TORQUE AVAILABLE | DUAL ENG | | SINGLE ENG | | | |
| | | | #1 | #2 | | |
| | TR | 1.00 | TR | 1.00 | TR | 1.00 |
| | 100 | 1117 | 122 | 132 | 122 | 132 |
| | 18941 | 22029 | | | | |
| MAX ALLOWABLE GWT (GCE/GS) | 18941 | | 22029 | | | |
| PREDICTED HOVER TORQUE (GS) | 48 | | | | | |
| PREDICTED HOVER TORQUE (GCE) | 57 | | | | | |
| REMARKS: AR-640 (7700-GE-7010) | | | | | | |
| * Indicates calculations that exceed AWR limits or aircraft capabilities | | | | | | |
| Release ID: OPR270 | | | | | | |
| Input Name | Departure | Enroute | Arrival | | | |
| Air-Tice | off | off | off | | | |
| Roll-to-Margin | 0.100 | | 0.100 | | | |
| Download Clange | 0.000 | 0.000 | 0.000 | | | |
| Dual Engine Limit | Dual Engine Continuous | Dual Engine Continuous | Dual Engine Continuous | | | |
| GE Hover Height | SD | | SD | | | |
| Transmissio Limit | Limit Torque | Limit Torque | Limit Torque | | | |
| Single Engine Limit | Single Engine Contingency | Single Engine Contingency | Single Engine Contingency | | | |
| Flat Plate Drag Clange | | 0.000 | | | | |
| Gross Weight | | 14517 | | | | |